Work Orde February-21-13	er ID 97736	<u> </u>		*977	736*						Page 1
Item ID: Revision ID: Item Name:	D4148-041 Crosstube Lug Ass	embly Fwd		Accept	*N900)040	100)*	Setup Sta	1.7	S1* S2*
Start Date: Required Date: Reference:	3/05/13 St	art Qty: 3.00 eq'd Qty: 3.00	*3* *3*		Cust Item Customer:						.J/
Approvals:		ML5		/ Tooling: SPC (Y/N):		Oate: Oate:		j	Run Sta Sto	17	R1* R2*
Sequence ID/ Work Center I		peration scription		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revisio	n Nbr		1/16							e.C.
D4148	D		DICK	Kit			-	λ	50	13-3	3-/8.
*100 *100* Small Fab Small Fab		Memo 1- Assemble	e as per dwg	0.00				34			J3/0
110 *110* QC Quality Control	QC	C5- Inspect part compl Memo	leteness to step on W/O	0.00) (a)			3	_		
120 *120* Packaging	Ide	entify as per dwg & St Memo	rock Location: <u>574</u> 66	0.00				3			13-03-2

Packaging

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	100	NFORM	MANCE / UP	DATE	QA Closed:	 Date:	
						DISPOSITION				AGAINST DE			
Work Ord	er:				:	DISPOSITION				AGAINST DE	PARTIVICIVI) -	PROCESS	_
Part f	- _ No.					Rework Scrap Use-as-is		ī	Skid-tube Machining noforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR I	No					Work Order Update			Large Fab	Composite]	Supplier	
Root					Descri	ption of work order update	ı	nitial	Ac	tion	Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling											:	·	
Operator													
Material					i								
Setup													
Other													
Process													
Supplier							'						
Training	Ш												
Unapproved			<u> </u>								<u> </u>	<u> </u>	
							AUL	T CATE	GORY				
Landi					_	General		7			7	_	-
		Bending				Bend	<u> </u>	Grain			Ovalized	<u> </u>	Pressure/Forced
	-	Centre No	ot Concei	ntric to	o/s	BOM/Route	<u> </u>	Hardwa		ļ	Over/Under	<u> </u>	Temperature/Cure
	-	Cracks			ļ	Broken/Damaged		4 '	on Incomplete		Part Incorre	<u> </u>	Weld
	\vdash	Crushed/0	Crimped.		\vdash	Burrs	<u> </u>	1	ions Incomplete/	'Unclear	Part Lost/M		Wrong Stock Pulled
	\vdash	Cuffs				Contamination		Mainte		<u> </u>	Part Moved		
	Heat Treat					Countersink	<u> </u>	Mislabe		<u> </u>	Positioned \		٦
	Inspection Strip in Tube					Cut Too Short	<u></u>	Misread			Power Loss/	Surge	Other
	-	Ripples in				Drill Holes	<u></u>	Offset					
		Torque W	aves in E	extrusio	n	Drawing		Out of 0	Calibration				

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ord				*977	736*			Page 2
Item ID: Revision ID: Item Name:	D4148-041 Crosstube Lu	g Assembly, Fwd		Accept	*N900040100)* Seti	p Start Stop	*NS1* *NS2*
Start Date: Required Date: Reference:	3/05/13 : 3/05/13	Start Qty: 3.00 Req'd Qty: 3.00	*3* *3*		Cust Item ID: Customer:			
Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):	Date:	Run	Start Stop	*NR1* *NR2*
Sequence ID/ Work Center I	D	Operation Description	Work Order Paleace	Set Up/ Run Hours	Tool ID Tool # Plan Code	•		Reject Insp.

0.00

Memo

Quality Control

13/3/28 D MF 13-3-28

										DQA:	Date	a: _	
NCR:	Yes / No)			WORK ORDER NON-C	100	VFORI	MANCE / UPD	ATE				
										QA Closed:	Date	5:	
					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Work Ord	er:	•••			Rework	1		Skid-tube	Crosstube	7	Water Jet		Engineering
Dart !	VI.O.				Scrap	1		Vachining Vachining	Small Fab	Pro	d. Eng. Coor.	\dashv	Quality
Part f	NO				Use-as-is	┧╏		noforming	Finishing	-	re/Packaging	\dashv	Other
NCR I	Nο				Work Order Update	1	1110111	Large Fab	Composite	1 1100,010	Supplier	\dashv	
TTCT T	···				Work order opacie			20.80 . 0					
Root				Descri	ption of work order update	i	nitial	Acti	on	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descri	ption	Date	Verification		QC Inspector
Doc/Data							,						
Equip/Tooling												ļ	
Operator													
Material													
Setup													
Other													
Process													
Supplier													
Training													
Unapproved						1			 	<u> </u>	<u> </u>		
						AUL	T CATE	GORY					
Landi	ng Gear			_	General	_	1			7	Г	一.	- /5 /
	Bendin	_			Bend	<u> </u>	Grain		<u> </u>	Ovalized		⊸	Pressure/Forced
	\vdash	Not Conce	ntric to	O/S	BOM/Route	-	Hardwa		 	Over/Under	F	_	Temperature/Cure
	Cracks			_	Broken/Damaged	_	4	ion Incomplete		Part Incorre	-		Weld
	—	d/Crimped		ļ	Burrs	\vdash	4	ions Incomplete/U	nclear	Part Lost/M		\	Wrong Stock Pulled
	Cuffs				Contamination		Mainte		<u> </u>	Part Moved			
	l luaat Tr	oat tea		ĺ	Countersink	1	Mislahe	led	Į.	Positioned 1	Wrong		

Misread

Out of Calibration
Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

February-21-13 12:42:10 PM

Work Order ID:

97736

Parent Item:

D4148-041

Parent Item Name:

Crosstube Lug Assembly, Fwd

Start Date: 3/05/13

Required Date: 3/05/13

Page 1

Start Qty: 3.00

Required Qty: 3.00

Comments:

IPP Rev:A 10.06.24 new issue DD verf:EC

IPP Rev:B 10.07.22 as per revB DD verf:JLM

IPP Rev:C 10.10.29 as per revC

Component Item ID/	Replacement	Mfa/	D:	D	Last	D = 114 =	Unit of	Qty on	Qty per Kit	Total	Otv	Date	Status
Item Name	Item ID	Mfg/ Purch	Bin Item	Primary Location	Location	Route Seq ID	Measure		Qty per Kit	Total Qty	Qty Issued	Issued	Status
MS21043-3		Purchased	No			100	Each	3,317.0000	4	6	00)	
Nut										1971	<u> </u>		
				Location		Loc Qty	Lo	c Code					
				FG		80							
				1	03691	80							
•				GA		106							
				1.	23899	106							
				ST315		3131							
				1.	23899	196							
				1.	24555	2935				lox			_
MS21043-4		Purchased	No	•		100	Each	1,291.0000	1	ર_	~ 12	·-3-	-18
Nut										<u> </u>	M)) -)-	<u> </u>
				Location		Loc Qty	Lo	oc Code					
				FG		36							
				1	04603	36							
				GA		132							
				1	21652	132							
				ST315		1123							
				1	21162	25							
•					23021	500							
					23525	29							
				1	23900	569				(X			
				•						-			

										DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-C	100	NFORM	ANCE / UPI	DATE		_	Ž.
										QA Closed:	Date:	
Work Orde	~r·				DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS	
WORK Orde	=1.				Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo	. —			Scrap Use-as-is		ľ	Machining noforming	Small Fab Finishing	1	d. Eng. Coor.	Quality
NCR N	No				Work Order Update			Large Fab	Composite	1100,3101	Supplier	
Root				Descri	ption of work order update		Initial	Act	tion	Sign &		
Cause	Date	Step	Qty	C	or Non-conformance	Ch	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data		Ĭ								1		
Equip/Tooling												
Operator												
Material												
Setup			1									İ
Other												
Process												•
Supplier												İ
Training											:	
Unapproved		<u> </u>				<u> </u>				<u> </u>	<u> </u>	
					F.	AUL	T CATE	GORY				<u> </u>
Landir	ng Gear			,	General	_	7		 -	1	r	
	Bending			<u> </u>	Bend	<u></u>	Grain			Ovalized	.	Pressure/Forced
	Centre N	ot Conce	ntric to (D/S	BOM/Route	<u></u>	Hardwa			Over/Under	├	Temperature/Cure
	Cracks			<u></u>	Broken/Damaged	<u></u>	4 '	on Incomplete	<u> </u>	Part Incorre	-	Weld
		Crimped.		<u> </u>	Burrs	<u>_</u>	4	ions Incomplete/	Unclear	Part Lost/M	_	Wrong Stock Pulled
	Cuffs				Contamination	_	Mainte		_	Part Moved		
	Heat Tre			<u> </u>	Countersink	_	Mislabe			Positioned \		. .
		n Strip in	Tube		Cut Too Short	<u></u>	Misread	l		Power Loss/	'Surge	Other
	Ripples in	n Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

February-21-13 12:42:10 PM

Work Order ID:	97736							
Parent Item:	D4148-041					Start	Date: 3/05/13	Required Date: 3/05/13
Parent Item Name:	Crosstube Lug Assembly, Fwd					Start	t Qty: 3.00	Required Qty: 3.00
D2690-6 Lanyard Assembly	Manufactured	No		100	Each	26.0000	1 $\mathcal{Z}X\mathcal{J}$	397995 SP
	•		Location	Loc Qty		Loc Code	1 X B	97274
			GA	4				<u>.</u>
			96592	4				_
			ST014	22				_
			94775	10				_
			95935	8				_
			96463	4				<u>-</u>
D3910-1	Manufactured	No		100	Each	42.0000	1 ,	3 \sim
Crosstube Lug							CO00010 10 10 10 10 10 10 10 10 10 10 10 1	
•			Location	Loc Qty		Loc Code		J
			ST464	42				
•			81474	2				_
			87270	9				_
			89772	i				_
			93755	30			3\	_
D4091-1 Mounting Lug	Manufactured	No		100	Each	15.0000	1	3 3975/7SP
			Location	Loc Oty		Loc Code		· —
			ST144	15				,
			93232	15				
D4148-1 Crosstube Lug Plate, Fv	Manufactured vd	No		100	Each	17.0000	2	6 3 /03 /26
			Location	Loc Qty		Loc Code		
	•		ST145	17				
			85753	2				= $139 = 0$
			92488	7				= P17907
			92805	8				65

										DQA:	Date	:
NCR:	Yes / No				WORK ORDER NON-	CONFO	ORN	MANCE / UPDATE		04 01	Data	
···				<u>:</u>						QA Closed:	Date	
NA/ multi Ourds	~				DISPOSITION	ł		AGA	AINST DE	PARTMENT,	/PROCESS	
Work Orde	er:				Rework	1		Skid-tube Cross	stube]	Water Jet	Engineering
Part N	do.				Scrap	1		<u> </u>	II Fab	Pro	d. Eng. Coor.	Quality
raiti	···				Use-as-is	1 TI		~ 	shing	ł	re/Packaging	Other
NCR N	No	.,.			Work Order Update	1 "		Large Fab Comp	~ 	,	Supplier	
Root		_		Descri	ption of work order update	Initia	al	Action	, ·	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief	Eng	Description		Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup												
Other							1					
Process							ļ					
Supplier												
Training												
Unapproved		1								<u> </u>		
					F	AULT C	ATEC	GORY				
Landi	ng Gear				General					,	p	-
	Bending			L	Bend	Gra	ain			Ovalized		Pressure/Forced
	Centre N	ot Concer	ntric to C)/S	BOM/Route	Har	rdwar	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Ins	pection	on Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped.		<u> </u>	Burrs	Inst	tructi	ons Incomplete/Unclear	<u> </u>	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination			nance		Part Moved		
	Heat Trea	at			Countersink	Mis	slabel	led		Positioned \		\neg
	Inspectio	n Strip in	Tube		Cut Too Short	Mis	sread			Power Loss/	'Surge	Other
	Ripples in	Bend			Drill Holes	Off	fset					

Out of Calibration Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

February-21-13 12:42:10 PM

Work Order ID:	97736							
Parent Item:	D4148-041					Start D	eate: 3/05/13	Required Date: 3/05/13
Parent Item Name:	Crosstube Lug Assembly, Fwd					Start (Qty: 3.00	· Required Qty: 3.00
D4148-3 Stud Receiver, Lower	Manufactured	No		100	Each	10.0000	1	3, B97611 SP
			Location	Loc Qty		Loc Code		·
			ST145	10				
			93419	10				
D4148-5	Manufactured	No		100	Each	10.0000	1	3 SP
Eyebolt Stud								207507
٠			<u>Location</u>	Loc Qty		Loc Code		B975873X
			ST145	10				
13/20121		Ma	64187	10 100	Each	265.0000	2	
AN3C12A Bolts	Purchased	No	•	100	Eacii	203.0000		80
Dons			<u>Location</u>	Loc Qty		Loc Code		
			GA	15		<u>Loc Code</u>		
			122416	15				
			ST351	250				
			124561	250				<u>X</u>
AN4C13A	Purchased	No		100	Each	160.0000	3	9 500
BOLT							· · · · ·	87
			<u>Location</u>	Loc Qty		Loc Code		
			ST356	100				<u> </u>
			123900	100				
			ST516	60				<u></u>
MS17984-C413	D 1 1	No	124215	60 100	Each	41.0000		<u>x</u>
PIN, QUICK RELEASE	Purchased	NO		100	Lacii	41.0000	` <u> </u>	0,13-3-18
in, quien negenoe			<u>Location</u>	Loc Oty		Loc Code		
			ST332	2		not cout		
			118612	2				
			ST508	39				
			124231	39			3×	

												DQA:	Date	e:	
NCR:	Yes /	No				WORK ORDER NON-	coi	NFORN	ANCE / UP	DATE		·		-	
					· · · · · · · · · · · · · · · · · · ·				*****			QA Closed:	Date	e:	
Work Ord	or:					DISPOSITION				AGAINST [DΕ	PARTMENT	/PROCESS		·
WOIK OIG						Rework	ן ר		Skid-tube	Crosstube			Water Jet	\neg	Engineering
Part f	No.					Scrap	1		Machining	Small Fab	_	Pro	d. Eng. Coor.	╗	Quality
						Use-as-is	1	Therm	noforming	Finishing		Rec/Stor	re/Packaging		Other
NCR I	No					Work Order Update]		Large Fab	Composite			Supplier		
Root					Descri	ption of work order update		Initial	Ac	tion		Sign &			
Cause	[Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription		Date	Verification		QC Inspector
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process	Ш														
Supplier	Ш														
Training							ļ	į							
Unapproved															
							AUL	T CATE	GORY						
Landi	ng Gea				_	General	_	1		г		1	г		
	\vdash	nding				Bend	<u> </u>	Grain		1		Ovalized	-		Pressure/Forced
			t Concer	itric to (D/S	BOM/Route	<u> </u>	Hardwa		-		Over/Under	-		Temperature/Cure
	Cracks Broken/Damaged						<u> </u>	4	on Incomplete	-		Part Incorred	1		Weld
	Crushed/Crimped Burrs						<u></u>	1	ions Incomplete/	Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
	Cuffs						<u> </u>	Mainte		}		Part Moved			
•	${f H}$	at Trea			<u> </u>	Countersink		Mislabe		1		Positioned V	· ·		1
	Inspection Strip in Tube					Cut Too Short		Misread		L		Power Loss/	Surge		Other
	Rip	ples in	Bend		ı	Drill Holes	1	Offset							

Out of Calibration Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

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February-21-13 12:42:10 PM

Work Order II) :	97736													
Parent Item:		D4148-041								Start Da	ate: 3/05/1	13	Required Date:	3/05/13	
Parent Item Na	ıme:	Crosstube Lug Assen	nbly, Fwd							Start Q	ty: 3.00		Required Qty:	3.00	
MS20615-4M18 Rivet			Purchased	No				100	Each	214.0000	8	24 24x/2	12485	5 80	,
					Location			Loc Qty		Loc Code				•	
					GA			7							
						122452		7							
					ST312			207						•	
						123390		22							
						124331		185							
NAS1149C0332I Washer	R		Purchased	No				100	Each	11,145.000	4	12	80	and the same of th	
					Location	ı		Loc Oty		Loc Code		•	·		
					FP001	•		264		200 0000					
					FF001	123355		264			•				
					ST292	123333		5881							
					31292	123248		33			-				
						123759		5848			10	22			
					ST517	123737		5000							
					31317	124580		5000							
NAS1149C0432 Washer	R		Purchased	No		121000		100	Each	2,818.0000	6	18 (93-	3-18.	2
Washer					Location	1		Loc Oty		Loc Code					
					GA			33							
						121255		33							
					ST292			2785							
						119124		6				_			
						122441	•	2779			_/\$				
												-			

										DQA	A: Dat	te:	
NCR:	res / No				WORK ORDER NON-O	O	NFORM	AANCE / UP	DATE	QA Closed	d: Dat	to:	
					<u> </u>	-	ı			QA CIOSEI	ı. Da	ie.	
Morle Orde					DISPOSITION				AGAINST DI	EPARTMEN	T/PROCESS		
WOIK OIGE	er:				Rework	1		Skid-tube	Crosstube	٦	Water Jet		Engineering
Part N	lo				Scrap		ľ	Machining	Small Fab	Pi	od. Eng. Coor.		Quality
					Use-as-is			noforming	Finishing	Rec/St	ore/Packaging	_	Other
NCR N	10				Work Order Update]		Large Fab	Composite	J	Supplier		
Root				Descri	ption of work order update		Initial	Act	ion	Sign &			
Cause	Date	Step	Qty	(or Non-conformance	Cr	nief Eng	Descr	iption	Date	Verification	n	QC Inspector
Doc/Data													
Equip/Tooling													
Operator .													
Material												1	
Setup													
Other													
Process										'			
Supplier									•				
Training				·									
Unapproved													
					F.	AUL	LT CATE	GORY					
Landi	ng Gear	-			General		_						
	Bending				Bend		Grain		L	Ovalized		\vdash	Pressure/Forced
	Centre N	lot Conce	ntric to	o/s	BOM/Route	L	Hardwa	re		Over/Und	er tolerance	Ш	Temperature/Cure
	Cracks				Broken/Damaged	L	Inspecti	on Incomplete		Part Incor	rect	Щ	Weld
	Crushed/Crimped.				Burrs	L	Instruct	ions Incomplete/L	Jnclear .	Part Lost/	Missing	∐'	Wrong Stock Pulled
	Cuffs				Contamination		Mainte	nance		Part Move	ed		
,	Heat Tre	at			Countersink		Mislabe	led		Positioned	d Wrong		
	Inspection	on Strip in	Tube	[Cut Too Short		Misread	i		Power Los	ss/Surge		Other
	Ripples in Bend				Drill Holes		Offset						

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

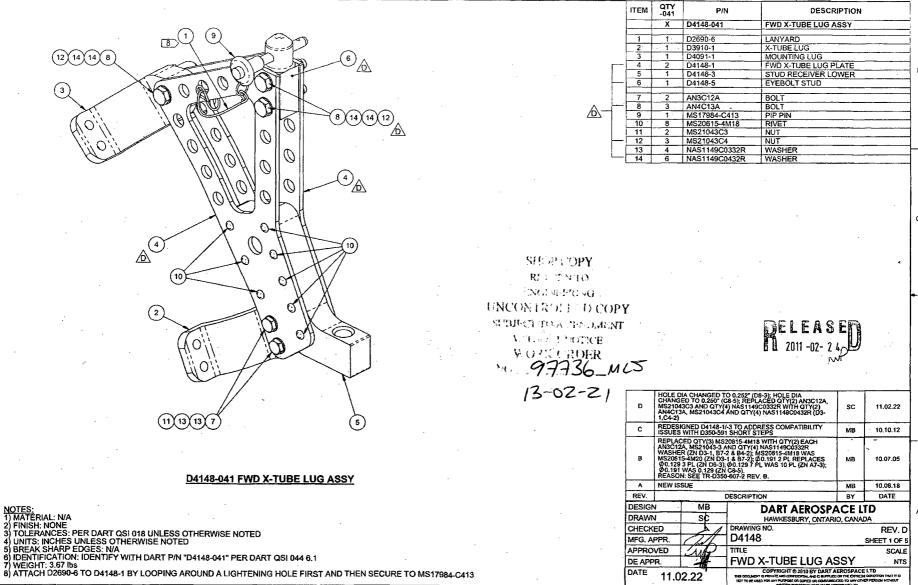
Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



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